Radical Prostatectomy Patient Pathway

UNC Urology Medical Center Office
NC Memorial Hospital, 2nd Floor
101 Manning Drive
Chapel Hill, NC

Important numbers:

PreCare Urology Clinic
Phone: (984) 974-0250
Fax: (984) 974-8235

Urology Clinic
Phone: (984) 974-1316
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Urology Oncology
Phone: (984) 974-8159
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BEFORE SURGERY: PRE-ADMISSION

Your goals are to:
- Learn how prostate cancer has affected your body.
- Learn about the proposed surgery and the risks involved with it.
- Discuss any necessary tests and treatment prior to surgery.
- Obtain bowel prep instructions and review.
- Discuss with our caregivers any concerns you have about the surgery.
- Learn about the ways for controlling pain following the surgery.
- Learn how to do Pelvic Floor Exercises (Kegel) and to practice them before you come to the hospital.

What to do:
- Keep all your preadmission appointments.
- Review all of the material in this booklet.
- Think about your transportation arrangements.
- Review your bowel prep instructions (Page 3) and obtain the necessary supplies.
- Call the nurse at your physician’s office if you have any questions.

Appointments:
- Urologists, who will discuss the procedure in detail with you.
- Nurse in the Pre-Care Center.
- Urology Residents who will perform a preop evaluation, that includes a lot of paperwork and signing of the informed consent form and do a physical examination.

Tests:
To be ordered by the resident during preop and performed at the Pre-Care appointment.
- Blood tests
- Chest x-ray
- EKG
- Other Tests if necessary

Medicines:
- Continue to take all of your regular prescription medicines until the night of the surgery.
- Please make sure to stop all blood thinning medications including aspirin, Coumadin, Plavix, Naprosyn, Alka-Seltzer, BC/Goody’s powder, Aleve, ibuprofen and/or Advil 10 days prior to surgery, unless otherwise instructed.
• Avoid all supplemental or alternative medicines for 2 weeks prior to surgery.
• All other medications should be taken even the morning of the surgery with a sip of water.
• Bring all of your medications (both prescription and over-the-counter medications) to the hospital on the day of the surgery.

Diet:
• Between now and the time you come into the hospital eat a healthy diet. This includes lots of fruits and vegetables that are low in fat.
• Take nothing by mouth after midnight the day before surgery (unless instructed otherwise).
• Take a Fleets enema in the evening prior to surgery (may be purchased without a prescription at the drugstore). You will be given another Fleets enema upon arrival to the hospital the day of surgery.
• See preoperative instructions given to you at preop appointment.

Activity:
• Practice the Pelvic Floor Exercises (Kegel) (Page 13) every day. Do three separate sets of 10 repetitions.
• Add walking to your daily routine all the way up to surgery including the day before surgery.
• If you smoke, please cut down (or quit) before you come to the hospital for surgery. This will help your lungs recover more quickly after surgery.

Discharge Planning:
• A social worker is available to speak with you if you have concerns about self-care needs after you leave the hospital.
• A financial counselor is available to assist you with questions about hospital bills and insurance.
• A separate section in this packet called discharge planning will provide further instructions for you after you leave the hospital.

PRE-OPERATIVE PREPARATION

Diet and Bowel Preparation:
• Take nothing by mouth after midnight the day before surgery (unless instructed otherwise)
• Take a Fleets enema in the evening prior to surgery (may be purchased without a prescription at the drugstore). You will be given another Fleets enema upon arrival to the hospital on the day of surgery.
• Other __________
**Medication Instructions:**
- Avoid the use of prescription or non-prescription drugs containing blood thinners one week prior to surgery. This includes, but not limited to Aspirin, Aleve, BC/Goody powder, Advil and Ibuprofen. If you are taking Coumadin or Plavix or Lovenox, discuss with your doctor. Follow instructions from your doctor or nurse regarding the use of all other medications prior to surgery.
- Other __________

**General Instructions:**
- During the preoperative work-up in PreCare, you will have a chest x-ray, EKG and blood work done as indicated by your doctor. A nurse will give you any other specific instructions to “get ready” for the day of surgery. You will receive a phone call from PreCare on the afternoon before surgery with your arrival time for the procedure.
- Other __________

**THE DAY OF SURGERY**

**Goals:**
- Be able to describe your diagnosis and the planned surgery.
- Know what allergies you have to medications because you will be asked this multiple times.
- Meet with an anesthesiologist prior to your surgery to understand the anesthesia plan.
- Let the nurses know when you are having pain after surgery so that they can give you pain medicine.
- Get out of bed and walk for a short period the evening of your surgery.

**Caregivers:**
You will see multiple nurses and doctors during this day.
- Operating room nurses
- Recovery room nurses
- Nurses on the hospital floor where you will spend the night.
- Team of urology doctors including residents, medical students, and the attending.

**Anesthesiologist** (The doctor who will put you to sleep and wake you up after the surgery.)
Treatments:
You should expect:
- Vital signs will be taken. This includes temperature, pulse, blood pressure, and respiratory rate. These will be taken multiple times before, during, and after surgery. You will even be woken to obtain this important information.
- A catheter will be placed in your bladder while you are asleep, and you will wake up with this tube draining through your penis to a bag after the surgery.
- A pelvic drain will be placed in the area where your prostate used to lie and will come through a small hole in your lower abdomen and drain to a little suction ball. This will be emptied at multiple times and the output will be measured. Occasionally, patients will go home with this in place and if this occurs, you will need to learn how to take care of this and measure the output.
- You will have frequent physical examinations from nurses and doctors.
- You will have at least one IV in your arm. This is a small tube placed into a vein to give you fluids and medications. This is usually removed just before you go home.
- You may be given supplemental oxygen through a little tube that runs underneath your nose.
- You will be taught to use an incentive spirometer (a device to help you take deep breaths) to keep your lungs working well.

Medicines:
- Pain medicine is available for you in multiple forms. Please ask for it if you are uncomfortable.
- Antibiotics will be given through your IV to prevent infection.
- Your regular medications will be provided for you. Please do not use your medications from home unless instructed to do so.

Diet:
- Do not eat or drink anything after midnight the night before you come in for your surgery.
- If you need to take medication take it only with a small sip of water.
- After surgery you will be given clear liquids, ice chips, or water. Most patients get regular food the following morning.

Activity:
The evening after your surgery, you will get out of bed and walk a little bit. This is extremely important because it helps with your circulation and with your lung inflation. Ask your nurse to help you when you get up the first time.
Teaching:
Your nurses and the urology team will teach you:
• How to use the incentive spirometer
• How to use the bed controls
• How to call for a nurse
• About your care following the surgery
• The day after your surgery, you will be instructed in how to care for your Foley catheter. This includes how to change the drainage bag from the large bag that goes over the side of the bed to a small bag that straps to your leg and can be worn under loose pants so that when you are home you can walk around outside without anybody knowing that you have a catheter in place.

DAY 1 AFTER SURGERY

Goals:
• Describe the procedures and treatments you are having. Explain and demonstrate plans and treatments you will do at home.
• Help with the care of your incisions and your catheter, which you will wear home from the hospital.
• Be able to tell the difference between bladder spasms and pain from your surgery.
• Walking the hall at least four times, more if you’re able.
• Continue to use the breathing device.
• Talk with your doctors and nurses about any concerns you have about the hospital treatments and your recovery.
• Drink fluids and eat your breakfast.
• Pass gas and/perhaps have a bowel movement before you leave the hospital. This may require a suppository.
• Assume care for the catheter which you will “wear” home.
• Most patients are well enough to go home in the afternoon this first day after surgery.

Caregivers:
• Nurse on 5 West
• Team of Urology Doctors

Tests:
• You will have blood drawn for testing.

Treatments:
• Vitals signs will be checked on a regular basis.
• You, the nurses, and the doctors will examine your belly to check the incision, the drain, and the catheter, and ask if you have passed any gas yet.
• The IV will continue.
• You will continue to use the incentive spirometer.

**Medicines:**
• Pain medicine will be available for relief of pain when you ask for it.
• Stool softener
• Toradd or Celebrex

**Diet:**
You will be allowed to drink clear liquids. You may be given a regular diet.

**Activity:**
You will be assisted to walk in the halls at least 5 times, walking a longer distance each time.

**Planning for Discharge:**
The nurses will answer any questions about your needs after discharge and will help you plan for this.

**Teaching:**
• The nurses will review use of the incentive spirometer and control of any pain.
• The nurses will provide written information and teach you about “Pelvic Muscle Exercises” (Page 13) and “home Care of Your Urinary Catheter” (page 15).
• Lear catheter care and use of leg bag.

**You may need to stay in the hospital for a second day depending on your condition.”**

**DAY 2 AFTER SURGERY**

**Goals:**
• Review goals of day one and prepare for discharge.

**Caregivers:**
• Urology doctors
• 5 West nurses
Tests:
• May or may not be needed

Treatments:
• Vital signs will be checked. Your belly will be looked at to check the healing of your incision, and the catheter and the drain will be checked to make certain they are in place and working well.
• You will be asked whether you are passing gas and moving your bowels.
• Continue to use incentive spirometer.
• IV fluids will be stopped.
• Vital signs to be checked one last time.
• The incision will be checked.
• Put on the leg bag for catheter drainage.
• IV will be removed.

Medicines:
• Pain medicine will be available for your comfort

Diet:
• You will eat a regular diet.

Activity:
• Walk around the hallways at least 5 times

Discharge planning:
• The nurse will complete teaching you about your care at home.
• The nurse will order supplies for you to take home.
• An appointment for your clinic visit will be made.

Teaching:
• The nurse will teach you about your care at home.
• The nurse will review with you the care of your catheter and use of drainage bags and the medicines you will take home
The nurse will review:
• Care of your catheter and use of the drainage bags
• Care of your incision
• Signs and symptoms of infection
• Reasons you might need to call your doctor
• The medicines you will take home
• Boundaries for your activities at home.
RETURNING HOME AFTER RADICAL RETROPUBIC PROSTATECTOMY

When you are ready to leave the hospital, there are several things to keep in mind as your recovery continues at home:

Activity:
You may shower but you should not take a tub bath until after the catheter has been removed. Do not soap or scrub your incisions. Let the water mainly run over the other parts of your body. Pat the incisions dry with a towel. Bring your catheter drainage bag into the shower with you.

You may walk up and down the stairs and are encouraged to go for walks as soon as your return home. It is best to start slowly and gradually increase the distance you walk. During the first weeks, you may feel better if you partially recline on a sofa, in a recliner, or in a chair with a footstool. Sitting with your feet up limits the strain on your incisions and helps the veins in your legs to drain, which reduces the possibility of clots.

You will be given elastic stockings in the hospital. We recommend that you continue wearing them at home until your activity as returned to normal.

You should not do any heavy lifting (more than 10 pounds, e.g. a 10-lb bag of potatoes or a gallon of milk) for at least 3 weeks after laparoscopic surgery.

You will not be able to drive for the first few weeks after surgery. We will help you determine when you can resume driving. It is important that you do not drive; while the catheter is in place, when you are experiencing incisional discomfort, when you are taking narcotics, or when concerns about leaking urine may prevent you from reacting quickly on the road should you need to.

Your Bladder Catheter
We recommend that you connect your catheter to the large drainage bag most of the time. Use the leg bag only if you plan to go out of the house. You may occasionally feel the urge to urinate while the catheter is in place. This is a bladder spasm and may cause a small amount of blood or urine to leak around the catheter. This may also occur when you have a bowel movement, especially if you strain. You should not worry about this as long as the urine keeps flowing freely through the tubing. You will not have as many spasms if you keep the urine bag below the level of your bladder so
that the tubing is not kinked, and the urine can drain properly. Please refer also to page 15, “How to Care for Your Catheter.”

From time to time, the urine may become blood-tinged, especially after walking or if you strain to move your bowels. This is not normal while the catheter is in place, and as long as it is not excessive, is not a cause for concern.

Some men have reported discomfort at the tip of the penis when the catheter is in place. It is important that the catheter be taped to the thigh to minimize movement of the catheter and prevent accidental pulling. You may find it more comfortable to apply bacitracin ointment, Vaseline or K-Y Jelly, around the catheter to the tip of your penis.

You will return to the Clinic 7-14 days after surgery to have your catheter removed. Two or three days before your catheter is removed, you will start taking an antibiotic. Before removed your catheter, the nurse will put about a cupful of fluid in your bladder. The catheter is removed very simply by deflating the balloon through a port on the outside portion of the catheter that then allows the catheter to slip out. After the catheter is removed, you will be asked to urinate this fluid so that the force of your stream and your urinary control can be observed. We will let you know if you are to continue the antibiotic.

The nurses will teach you about exercises that you can do to strengthen the muscle that allows you to hold urine in your bladder until you are ready to urinate. You should begin these exercises when you still have the catheter in place. (See Page 13 – Pelvic Muscles Exercises)

It usually takes time to regain urinary control. The nurse will provide you with disposable protection to wear after your catheter is removed and give you an information packet telling you where you can buy these products. This packet will also discuss realistic expectations regarding urinary control and how we will be checking on your progress. Do not use an incontinence device, such as a clamp or a condom catheter attached to a bag, without asking us. Use of these devices will slow your development of the necessary muscle strength to control your urine.

Urinary control is regained in three phases:
**Phase 1** – You are dry when lying down at night
**Phase 2** – You are dry while sitting down
**Phase 3** – You become dry when rising from a sitting position and with activity.
It is important that you can continue to drink fluids, as urine that is concentrated is more irritating to the bladder. Avoid alcohol and excessive amounts of caffeine (for example; cola, coffee, cocoa, tea) as these are also irritating to the bladder and make it harder for you to control your urine.

**Diet**
You may eat and drink whatever you like after you return home. Some men have mild stomach cramps or other digestive problems after the anesthesia. If you have a problem, you may want to avoid milk products as these are harder to digest. It may be several days before your normal bowel movements return. If you develop diarrhea, call us, because we may need to evaluate this further.

It is important to avoid constipation. We will give you a prescription for a stool softener that you may need to take until your activity and diet are back to normal. If you become constipated, you may take Milk of Magnesia. **Do not** use suppositories or enemas, as you could cause injury to your rectal wall.

**Swollen Testicles:**
During your surgery, the lymph nodes that are sometimes removed are the ones that drain the genitals (groin, scrotum, and penis). These areas may be swollen or bruised for a week or two after surgery. This usually corrects itself as the body develops other pathways to drain the lymph nodes. You will find it will be more comfortable if you support your genitals by putting a towel underneath them when you sit or lie down.

**Sexual Activity:**
The return of sexual function depends on your age and the size of your tumor. Erections may return gradually and improve month by month. Of those men who have a return of function, most do so within the first year, but it may take longer for others. For most men, erections continue to improve for a long time after the operation.

It is important to be patient and not to wait for the “perfect erection” before attempting intercourse. Try to have intercourse even if you have a partial erection. These attempts encourage erections. During the first year after surgery, touch is the major stimulus for erections so don’t be afraid to experiment with sexual activity.
You should be able to have an orgasm even if you are unable to have an erection. However, you will not ejaculate any fluid, because your prostate and seminal vesicles that produce the semen have been removed.

Remember – Be patient! We will ask you about your progress when we see you for follow up. While you continue to recover, there are options that will help you resume a satisfying sex life. We will discuss these with you.

Early results of research show that taking one of the erectile dysfunction pills can help patients return to sexual activity sooner. Your doctor may prescribe a PDE5 inhibitor such as Viagra, Cialis, or Levitra for this reason. The goal of taking a PDE5 inhibitor is not to have sexual intercourse, but to help keep blood flowing to the penis while you recover from surgery. These medications sometimes cause side effects such as headache, facial flushing, blue-tinged vision, and muscle aches. If you have discussed this treatment with your doctor, fill in the space below with the directions he or she has given you. If you have any side effects from the medicine, call the Urology clinic at 919-966-1315.

Instructions for Medications:

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When to Call the Doctor:

- If you notice signs of infection, such as swelling or redness around your incision.
- If you have a fever or chills. A fever is an oral temperature above 101 degrees F.
- If your catheter becomes clogged and urine no longer drains freely through it.
- If bleeding persists or becomes worse.
- If you have difficulty urinating after your catheter is removed.
- If you have any new sources of discomfort, for example, sore, swollen legs, or shortness of breath.

Call Urology anytime (24 hours a day) at 919-966-4131 and ask for the urology resident on call.
Follow Up:
After you have had your first follow up visit, we will see you at three months, six months, nine months, and annually thereafter. At these visits you will have a blood test that measure your Prostate Specific Antigen (PSA). After removal of the prostate, we expect this to be at an undetectable level. Because the prostate is gone, we do not continue to do rectal exams at each visit.

Our goal is to help you get back to normal. We will ask you about your urine control and your erectile function to help us monitor your progress.

If you choose to have your follow up care closer to home, please ask your physician to send us reports of these examinations so we can continue to follow your progress.

PELVIC MUSCLE EXERCISES (Kegel Exercises)

The organs inside the lower belly are supported by the muscles in the area between your legs. For many reasons these muscles can become weak and no longer support the organs very well. When these muscles get weak, people often will wet themselves when they laugh, cough, sneeze, or try to lift something heavy. Other people wet themselves because they cannot hold the urine until they get to the bathroom. Some people cannot pass urine because they cannot relax these muscles.

The muscles which support our organs are hidden and cannot be seen and felt like those in the belly, arms, and legs. The muscles which support your organs are the muscles you squeeze to stop yourself from passing gas. Until you know what you are doing with these muscles, you need to go to a quiet place to practice using them and practice several times every day. The following directions will teach you how to make these muscles strong, and to give you control over storing urine in the bladder and passing urine from the bladder.

Step 1: Which Muscles?
1. With your bladder full, lie down on your side and relax all of your muscles. Now you are ready.
2. Squeeze ONLY the muscles between your legs – not those in your belly, legs, or buttocks. You should have a “lifting” feeling between your legs when you squeeze the right muscles. Pretend to be shutting off the flow of urine.
3. When you squeeze these muscles, make sure you keep other muscles relaxed and do not hold your breath. You should breathe **out** as you tighten the muscles.

4. Once you know the right muscles to squeeze, try this test one time when you pass urine.
   a. First – sit on the toilet, for men, stand at the toilet and begin to pass urine.
   b. Second – after a few seconds squeeze the muscles to stop the flow of urine.
   c. Third – hold the muscles tight for a count of 3, then relax the muscles and empty your bladder.

   *If the muscles you squeezed stopped or slowed the urine flow, you used the right muscles.*

5. Until you are good at squeezing the muscles, lie down 3 times each day to practice. Squeeze and relax the muscles 5-10 times each time you practice.

   **Step 2: Now the Real Work Begins!**

1. Now that you know which muscles to squeeze, you need to do these exercises 4 times each day. You can do the exercises lying down, sitting, or standing, but the sitting position might be easier at first.

2. During each exercise period, squeeze the muscles **quickly**, and hold the squeeze while you count **slowly** to 5, then relax completely while you count slowly to 5. Do this squeeze-relax exercise 10 times at each exercise period.

   *If you cannot hold the squeeze to the count of 5 when you first start the exercises, just hold the squeeze as long as you can, and then relax. As your muscles get stronger with practice, you will be able to hold the squeeze.*

3. Once you can hold the squeeze to the count of 5, begin to hold the squeeze for a higher count, and relax the muscles for the same count. The goal is to be able to hold the squeeze to a **slow** count 10, then relax to a slow count of 10, and to do the squeeze-relax exercise 10 times – 4 times every day.

4. After 6-8 weeks of doing the exercises 4 periods each day, you should notice that you are not wetting yourself as much as or often as you did before you started exercising. If you DO NOT see a change, please talk with your nurse or doctor about seeing a doctor who treats these kinds of problems.

5. Do not do the exercises more than 4 times per day. You could tire out the muscles and leakage will occur.
Step 3: Life Goes On!
Like any other kind of exercise program, you must keep up the exercises to keep the muscles strong. Now you can do the exercises without even thinking about it. So, fit the exercises in with everything else you do, but do them regularly, like when you are eating, or watching TV, or even when you get into bed at night.

DAILY BLADDER DIARY

Keep a diary to help you keep track of bladder accidents AND to show what progress you are making as you learn to control your bladder.

Column 1: Date
Column 2: Write down the time you pass urine in the toilet.
Column 3: Small accidents. Write down the time you leak even a few drops of urine.
Column 4: Large accidents. Write down the time you really wet yourself.
Column 5: Write down a reason for every accident. Examples “coughed,” “couldn’t get to the bathroom in time,” “running to toilet.”

CARING FOR YOUR INDWELLING CATHETER AT HOME

Your doctor is sending you home with an indwelling catheter. This latex or non-latex tube permits continuous urine drainage, so you will not have to use a bedpan or the toilet. There is a balloon on one end of the tube that holds it inside your bladder. Your catheter is connected to a drainage tube that leads to the drainage bag. During the day, you may use a leg bag that is strapped to your thigh.

What is a Foley Catheter?

A Foley catheter is a thin, flexible tube that continuously drains urine from your bladder.
There are three important things to remember about the care of your catheter at home:

- Always keep the drainage bag and tubing LOWER than your bladder. If the bag is not lower than the bladder, your urine cannot drain into the bag. It is important to keep your bladder drained at all times.
- Your catheter must be kept taped to the skin to keep it from pulling and hurting inside of your bladder.
- The catheter and its tubing must not be “kinked” or bent or twisted in any way. Any of these problems will keep the urine from draining from the bladder. This could cause the urine to leak around the catheter and make you wet.

**Daily Care for Your Skin and Catheter**

- Wash the area around the catheter and the catheter tube twice a day with soap and water.
- Check for any irritation or soreness at the insertion site of the catheter.
- If you are not circumcised, pull your foreskin back over the tip of the penis after washing.

**How Often Will I Need to Empty the Drainage Bag?**

- Usually every 8 hours for the large drainage bag. If using a leg bag, it will be every 2-3 hours. (Refer to leg bag teaching section, page 17)
- Wash your hands thoroughly before and after your catheter care.
- To empty the bag, unclamp the drain tube and remove it from its sleeve.
- Do not touch the tip of the drain tube.
- Let the urine drain into the toilet or measure container.
- Swab the end of the drain tube with alcohol swabs, or soap and water, and replace the stopper.
- Re-clamp and insert the drain tube into its sleeve.
- **Important:** If any connections touch the toilet or container, wash with soap and water or alcohol swabs, and re-connect.

**Showering**

You can take a shower with the catheter. Just take the drainage bag with you and dry it off after your shower. As you wash, carefully wash the area where
the catheter comes out of your body, and then rinse it well. When you finish showering, carefully dry this part as you dry the rest of your body.

You should dry the tape carefully with towel. If you have a hair dryer blow COOL air on the tape to help it dry. Change the tape if it is not sticking well.

Are You Having Any Problems?

For example: Leaking urine around the catheter, pain and/or fullness in your bladder, blood in the urine, no urine drainage, passing clots, or sediment. All problems should be told to your health care provider, but the underlined items should be reported immediately.

Important: Never pull on the catheter or try to remove it yourself (unless instructed to do so) because of the potential injury to the urethra from the balloon.

Attaching Leg Bag with Extension Tubing

The leg bag is smaller and straps to your leg BELOW THE KNEE. It is to be used ONLY when you are out of bed sitting or walking around.

- Remove the bag, straps, and tubing from the package. Hold the leg bag to your leg below the knee with the drain at the bottom. Run each strap around your leg and
- Place the hooks over the “buttons” on the top and bottom of the bag. Adjust the straps so the bag will not slip – BUT NOT TOO TIGHT.
- Unhook your catheter from the beside bag and plug in the tubing.
- Stand up straight so someone can see if the tubing needs to be made shorter to fit the top of the leg bag. If it is too long, cut off the extra tubing while you are standing straight.
- Attach tubing to the leg bag. Now you can wash your hands and get dressed.

How to Use and Care for Your Leg Bag

You will need to empty your leg bag every 2-3 hours because it is smaller than the closed drainage bag you wear at night.

- Wash your hands thoroughly before and after your catheter care.
- Empty the bag by removing the stopper and drain all urine. Remember to hold bag upright. (If requested, empty into a measuring container and record the amount.)
• Swab the end of the drain tube with alcohol swabs or soap and water and replace the stopper.
• Make sure the bag is securely attached to your leg, but not too tight. (If the bag is too tight skin irritation and decreased circulation could result. If circulation is decreased, you may notice that your leg is becoming discolored.)

**Before Going to Bed, Replace the Leg Bag with a Large Drainage Bag. To Replace Your Leg Bag:**

• First empty the bag completely.
• Clamp catheter.
• Clean the area where the catheter and leg bag tube join with alcohol to remove as many bacteria as possible.
• Disconnect the catheter and the leg bag tube by gently twisting each tube in the opposite direction. Be careful not to pull on the catheter.
• Connect the catheter to the large bag tube you will be using at night time.
• Unclamp the catheter.
• Tape the drainage tube to the front of your thigh on the side next to the hanging drainage bag. Use Cath-Secure tube holder.

Leave enough slack in the tubing so it does not pull when you move your leg. When you get into bed arrange the tubing, so it is not kinked or looped so there is a “downhill” flow of urine. **Important:** make sure that collecting bags always remain below the level of the bladder.

**Cleaning the Leg Bag**

Every night after disconnecting the leg bag:
• Wash it with soap and water then rinse (1/4 teaspoon liquid soap added to pitcher of warm water).
• Fill the bag with vinegar and water mix (mix 1 ¼ cups vinegar to 2 quarts of water).
• Rinse the bag with the solution to reduce the urine smell and to control bacterial growth.
• Drain the mixture, rinse the bag, and hang the bag in a clean place with the drain open until you are ready to use it.

In the morning replace the closed drainage bag with your clean leg bag. Follow the steps above when cleaning the large drainage bag.
Preventing Bladder Infection When You Have an Indwelling Catheter

When you have an indwelling catheter, your risk of developing a bladder infection increases. However, there are steps you can take to prevent or at least control infection. It is important for you to report any warning signs for infection listed below to your health care provider immediately.

- Fever above 101 degrees F
- Cloudy urine
- Discharge around the catheter
- Pain in the suprapubic (bladder) area

You may not always be able to prevent infection, but here are some things to do which help reduce the risk of getting an infection:

- Drink at least 5 to 6 glasses of water every day. This helps flush bacteria from the urinary tract. Also, Vitamin C acidifies the urine, which helps decrease bacterial growth. Orange, grapefruit, or cranberry juice contains Vitamin C. Drink 1 or 2 glasses per day.
- Take the medicine prescribed by your doctor.
- Wash the area around the catheter and the catheter tube twice a day with soap and water.
- Fill the drainage bag with the vinegar and water mixture. Rinse the bag and tubing with the vinegar and water mixture once a day.
- Empty your leg bag and least every 2-3 hours. Empty your large drainage bag at least every 8 hours.
- Keep your drainage bag below the level of your bladder.
- Contact your health care provider if you have urine leaking around the catheter, pain and/or fullness in your bladder, or blood in the urine.
- Never pull on the catheter.
- Never try to remove the catheter yourself unless you have been given instructions about how to do it.

It is important for you to keep your follow-up appointments with your health care provider.

What to do if you think the catheter is blocked?

If you suspect that your catheter is blocked because you have been drinking plenty of fluid and urine has not flowed for the last two hours:

- Check to see if the tubing is straight and not kinked.
- Change position. If the catheter is lying against the bladder wall, urine will not flow.
• Try lowering the large drainage bag or the leg bag.
• **Do not remove the catheter yourself!** Contact your health care provider, Urology Clinic at 919-966-1315 or if after hours call UNC Hospitals operator at 919-966-4131 and ask for the urology resident on call.

**HOW YOU CAN HELP**

Your generous support of urology research and technological advances is much needed and greatly appreciated. Clinical and basic science research leads to ongoing improvements in our understanding and treatment of urologic diseases and has allowed the Division of Urology at The University of North Carolina to become one of the premier urology programs in the nation. Contributions made to the Carolina Urologic Endowment Fund at The University of North Carolina are tax deductible. Tax ID number 56-6057494.

If you would like to support the ongoing research in the Division of Urology at The University of North Carolina and have particular areas of interest for research support, please help by sending in a contribution made payable to:

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